

PULSARS

★NEUTRON STARS★

Interpretation of Quranic verses (86:1, 2, 3)

Introductory note:

This interpretation is completely new in the world, and I made it known in 2002. I published it in two magazines (Novi horizonti and SAFF in Bosnia and Herzegovina). I posted my commentary on Pulsar on the Internet, thus allowing interested parties to hear the sound of the pulsar with their own ears. I also put that work in textual and audio-visual form on a CD that I distributed for free in a circulation of 500 copies. The interpretation is conditioned by the literal translation of the first three verses of Surah At-Tarik.

This interpretation of mine has been adopted by numerous translators and commentators of the Qur'an. Learned Muslim circles automatically accepted it, because it is practically impossible to refute it, at least for now. The astronomical description of the pulsar fits perfectly with the mentioned verses. Some people have downloaded this interpretation and posted it on YOUTUBE as video clips. Some posted on their websites, and others wrote about it in their books, like the Turkish scholar prof. Ph.D. Caner Taslaman. Six years later (2008) dr. Zaghlul El-Naggar makes a video about pulsars where he expresses his delight saying subhanAllah...

The story goes like this:

One day in 2002, when I was studying pulsars, I noticed a striking coincidence between the first three verses of Surah At-Tarik and the explanation that astronomy gives about pulsars. Surah At-Tarik begins with an unusual oath:

1. Thank heaven and Tarika! /Knocker!/
2. And what do you know about Tarik? /Knocker?/
3. Star piercing!

In the dictionaries of the Arabic language, we will find that *tarik* means the one who knocks, who hits, who pounds.

Nejm means a star. *Sakib* means one who pierces, one who penetrates, one who flashes, one who shines.

Allah therefore swears by a star (*najm*), which produces pulsations like a pounding or knocking (*tarik*), while simultaneously emitting gigantic flashes of light, radio waves, gamma or X-rays (*saqib*)! We know how penetrating gamma rays, X rays, radio waves and light are!

And what kind of star is it that behaves as described in the first three verses of Surah At-Tarik?

Astronomers attribute the properties mentioned above only to neutron stars. Neutron stars are characterized by high density and extremely high rotation speeds, from one revolution in a few seconds to one revolution in 1.56 milliseconds! Such stars are called pulsars! A stream of particles erupts from the two magnetic poles of the pulsar. These particles produce a very powerful jet of light, radio waves, X or gamma rays. That stream cuts across the sky like the light of a lighthouse. The magnetic and rotational axis of the pulsar do not match! Every time this beam (whether as a beam of light, radio wave, gamma or X-ray) hits the Earth, a precise pulse of radio noise is heard that resembles the ticking (*tarik*) or striking of a powerful celestial clock accompanied by thunder! Hearing these blows with my ears I was amazed and convinced that indeed the first three verses of Surah At-Tarik could certainly refer to the extraordinary cosmic objects of the pulsar! Namely, if you connect via the Internet to one of the observatories that recorded this beating of neutron stars with large radio telescopes, you yourself will be surprised by the striking agreement of the quoted verses with the behavior of pulsars!

If our star, the Sun, would by some miracle condense like a neutron star into a body with a diameter of 10 km, its rotation speed would increase 5 billion times, that is, it would rotate 2000 times per second!

The most energetic pulsar was discovered in the Crab Nebula. It rotates 30 times per second and is strongly magnetized. Because of this, it acts as a celestial power station whose wind emits enough energy to make the entire Cancer Nebula glow in almost its entire spectral range.

The fastest are radio pulsars. Thus, the pulsar PSR1937+21 rotates over 360 times per second! It is believed that these phenomena of the emission of a penetrating light or radio flash are caused by the constant fall of matter from the

neighboring star, in the same way as if we were to strike (tareka) an already rotating globe with our finger, thus maintaining its speed of rotation!

Earlier interpretations of verse 86:1,2,3

In his commentary, Yusuf Ali (whose translation of the Qur'an into English was most widely used on religious internet newsgroups at the time) says that there is great disagreement as to what these three verses might refer to. Some commentators think that this is the Evening Star or the Morning Star (Venus, Danica), some that it is the planet Saturn, the star Sirius, the constellation Pleiades or the shooting stars. He also believes that it is most appropriate to take the word "tarik" to mean "star" in a collective and generic sense, because the stars shine every night of the year and their brightness penetrates the darkness of the night.

It should be noted that wanderings are also present in other translators and commentators of the Qur'an.

The sustainability of such interpretations.

Basic criteria. The characteristics of the celestial object mentioned in the verses (86:1-3) are that it:

- 1) knocks (hits, fights),
- 2) that it is a star,
- 3) to pierce, penetrate, penetrate.

None of the planets of the solar system can meet the criteria defined by the verses themselves, because

- none of the planets produce pulsations similar to knocking, beating,
- because neither Danica (Venus, Evening Star) nor Saturn are stars,
- because none of the planets has such strong radiation (both in the area of light and in the area of radio wave, X or gamma ray emission) to be interesting.

As for Sirius, it is a star that is essentially similar to billions of other high-brightness stars. The Pleiades star cluster also does not meet these criteria in that it is a question of several grouped stars with a characteristic appearance so that we see their "combined light" in the sky.

What we call "shooting stars" in our times are not stars at all, but small pieces of cosmic material the size of a grain of sand or slightly larger, which burn up when they enter the Earth's atmosphere due to friction with the air, developing intense light.

You can watch a video clip about pulsars at this address:

<https://www.youtube.com/watch?v=TCRyV7EVfy8&list=TLGGAmgY4SkYpHowNTEyMjAyMg&t=20s>

And Allah knows best!

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in 2002.